Figure 1. Melting Curves for Genotyping the Most Stable Mismatch

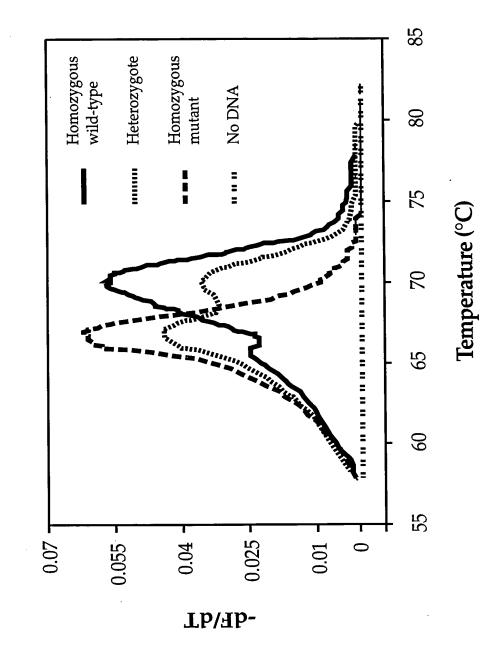




Figure 2. Continous (within cycle) monitoring of PCR with Hybridization and Exonuclease Probes

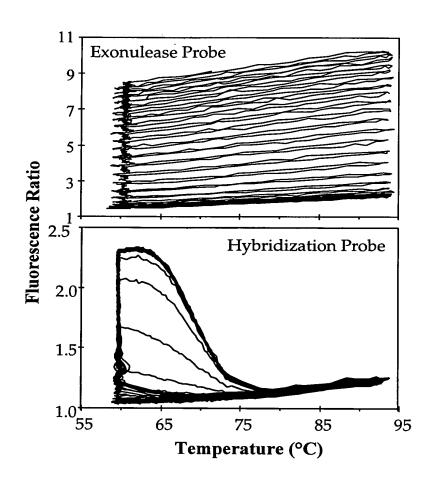




Figure 3. Multiplexing by Color and Tm

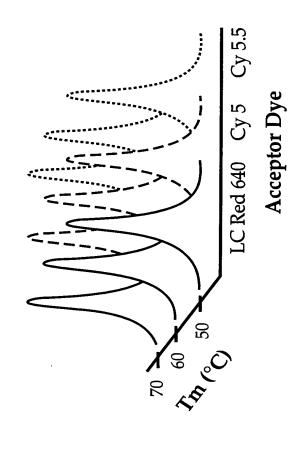




Figure 4. The Rapid CyclerTM

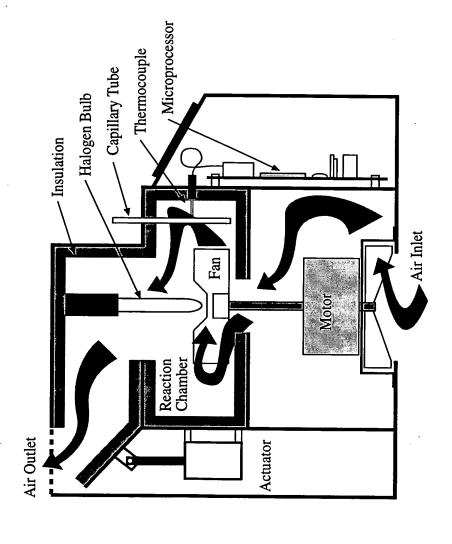




Figure 5. The Light CyclerTM

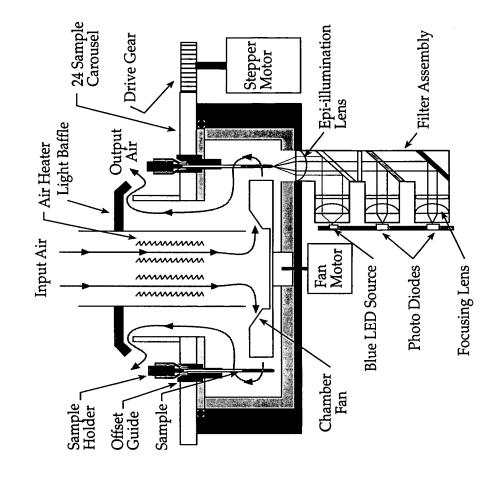
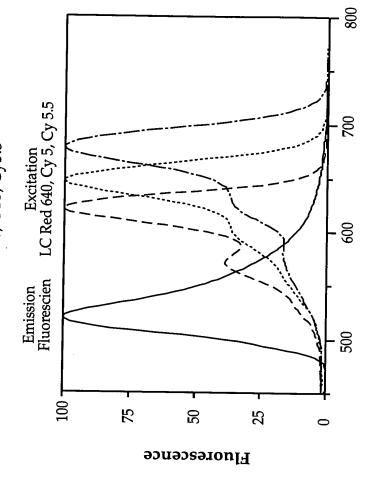




Figure 6. Spectral Overlap between fluorescein, LC Red 640, CY5, Cy5.5



Wavelength (nm)



Figure 7. Emission Spectra of Resonance Energy Transfer Acceptors

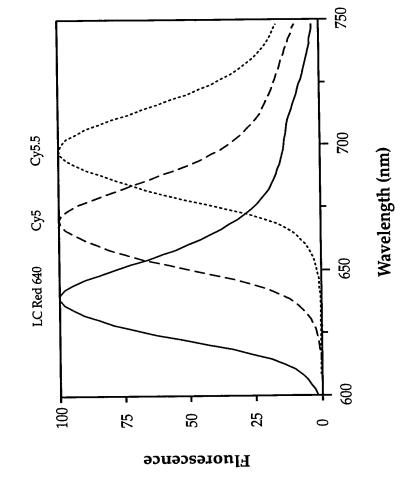
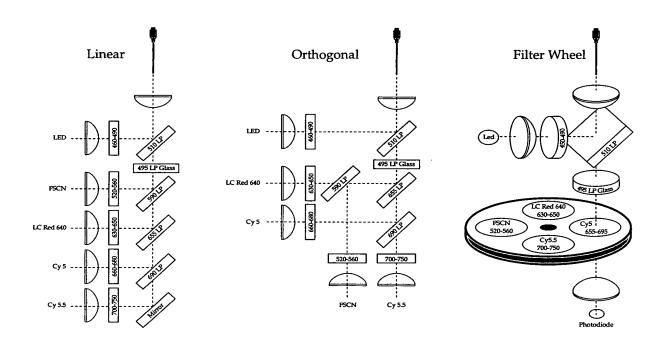




Figure 8. Four Color Light Cycler TM - Optical Design



Percent of Spectra in Band Pass						
	FSCN	LC Red 640	Cy 5	C		
en.						

	FSCN	LC Red 640	Cy 5	Cy 5.5
LED	47	0.8	0.2	0.3
FSCN	48	<0.1	<0.1	< 0.1
LC Red 640	1.5	41	7.8	0.8
Cy 5	0.7	14	43	11
Cy 5.5	0.4	7.7	16	49



E3 target 5'

E4 target 5'

E5 target 5'

E5 target 5'

E5 target 5'

E3 target 5'

E4 target 5'

E5 target 5'

E5 target 5'

E5 target 5'

E7 target 5'

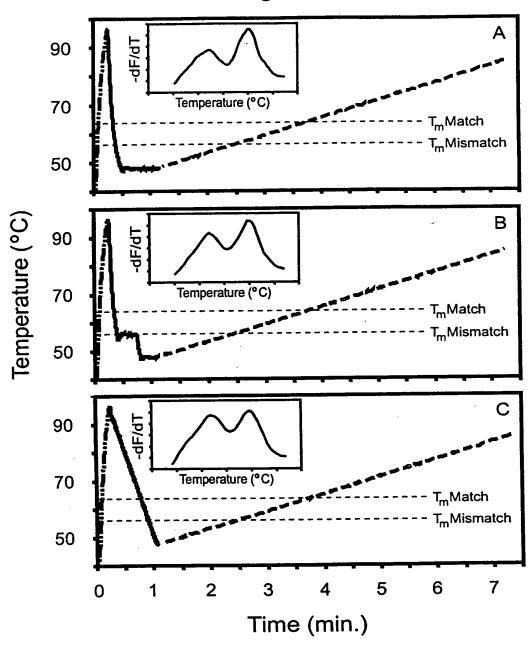
E7 target 5'

E8 target 5'

E8

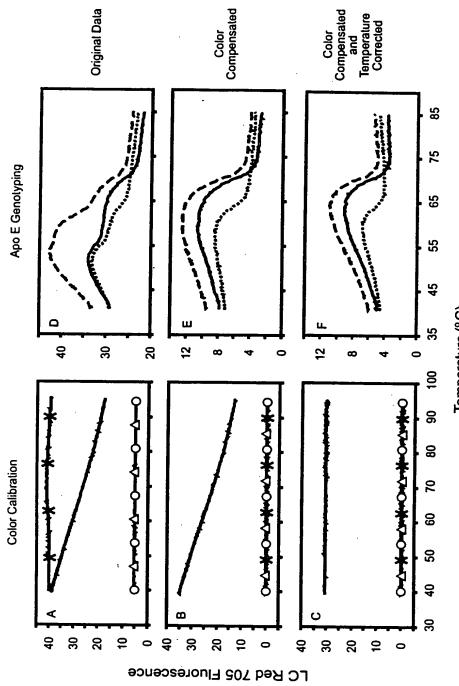


Figure 10.













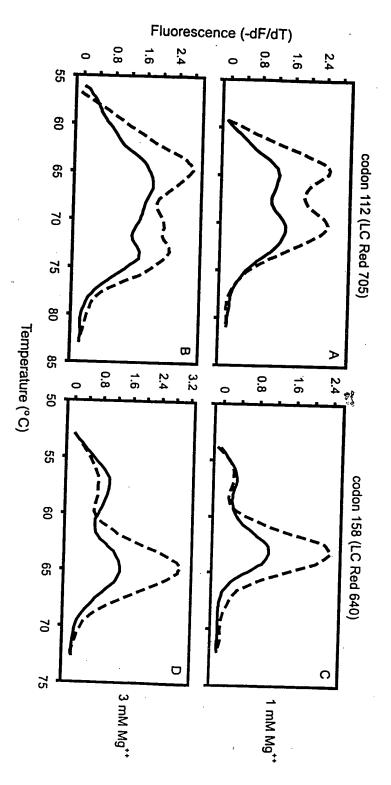


Figure 12.

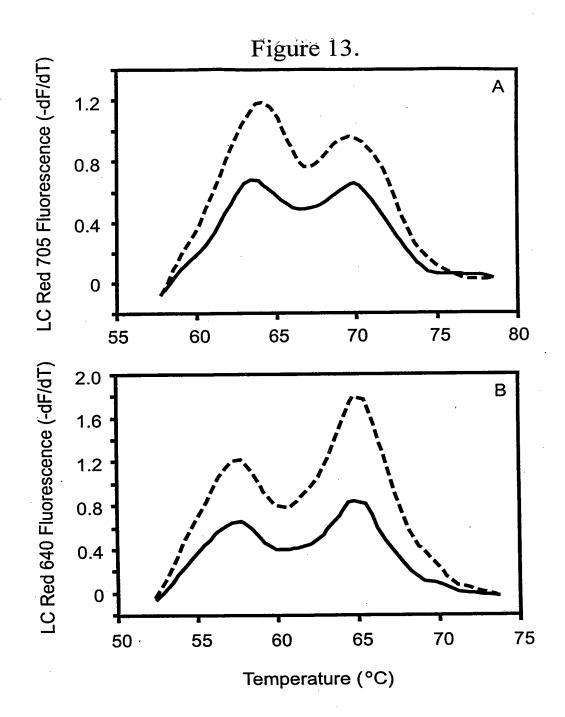




Figure 14.

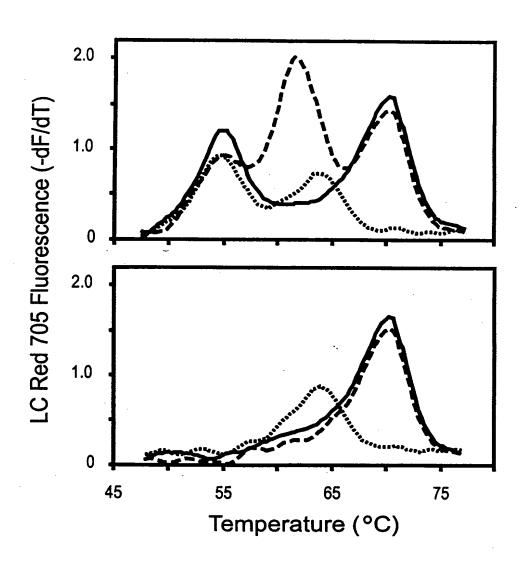




Figure 15.

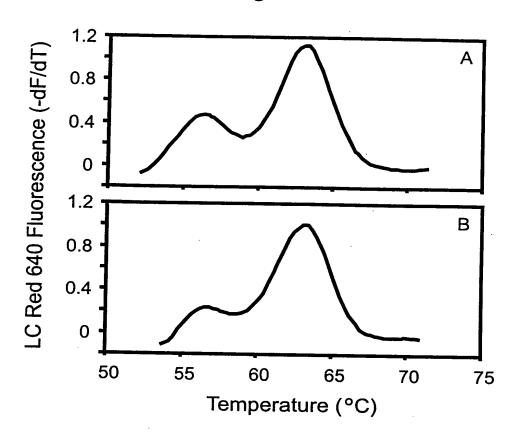




Figure 16.

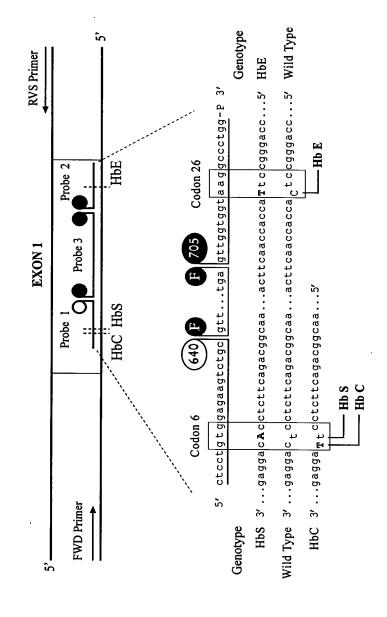
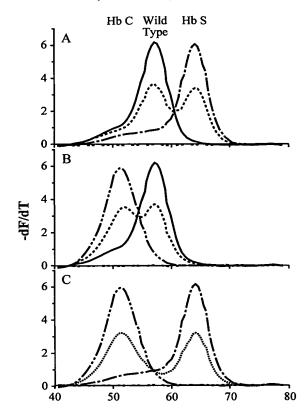




Figure 17.

Codon 6 Probe (LC Red 640)



Codon 26 Probe (LC Red 705)

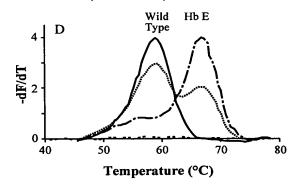


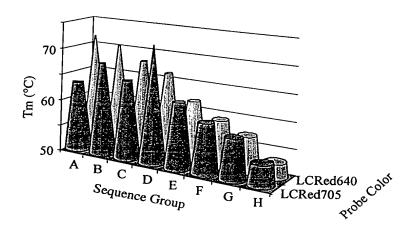


Figure 18.

Sequence Variation and Probe Design at HLA-A

CCGCGGGCRCCGTGGATAGRGCAGGAGRRKCCKGAGTATTGG	GGAC GCAG G	Matched Allele
GGCGCCCGCGCACCTATCTCGTCCTCCCCGGCCTCATAACC	TGGTCCTCTGTGCCTTATACTTCCGGGTGAG	0101
Anchor Probe	TGCCCCTCTGTGCCTTACACTTCCGGGTGAG	0208
Fluorescent	Multicolored Probes	
(LCRed640)	<i>(</i>	
LCRed705		

Figure 19. Predicted Tms for 2 Probes at a HLA-A Variable Reigon





	Matched Allele	0101	1101	rid			
Figure 20. Sequence Variation and Probe Design at DRB1	G A GCAGAG GCG G GCCGGT		//rcrerceccesec	// CGTGTTCGCCCCGGTCCAHybrid	Wulticolor Probes		
Figure 20. Sequence Variat	GAACAGCCAGAAGGACHTCCTGG A GCAGAG GCG G GCCGGGT AGGCGA C G CG	CTTGTCGGTCTTCCTGGAGGACC	Anchor Probe (Fluorescein)		(LCRed640)	(Cy3)	[LCRed705]



Figure 21. Predicted Tms for 3 Probes at a HLA DRB1 Variable Region

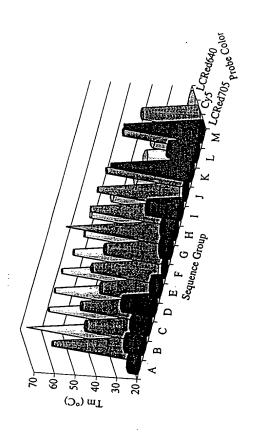




Figure 22. Scanning for Mutations

